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Health improvement in Poland is contingent on continued extensive tobacco control measures*

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Abstract

Tobacco smoking is a major avoidable single cause of premature mortality in Poland. Almost one in three Polish males do not live to 65 years of age, and almost half of this premature mortality can be traced back to the much higher smoking prevalence in Poland than in Western Europe – every third Polish male and every fourth Polish female smokes daily.

However, the current health situation in Poland is much better than two decades ago when the country entered a period of political and economic upheaval. In the early 1990s, the state of health of the Polish population was catastrophic and its tobacco consumption levels the highest in the world. In the early 1990s, the probability of a 15-year-old Polish boy living to the age of 60 was not just twice lower than in Western Europe, but also lower than in China or India.

The health policy of limiting the health consequences of smoking conducted by the European Union and, in the last two decades, by the Polish parliament and government, helped to stop this health catastrophe. In Poland, cigarette consumption has decreased by 30% since 1990, as did lung cancer mortality among males.

Despite this progress, tobacco smoking remains the most serious health problem in Poland. Therefore, comprehensive tobacco control policy should not only be continued, but expanded and accelerated. The EU Tobacco Products Directive proposes a package of actions for reducing tobacco-related health harm in Europe. The Directive proposal is rational, science-and-evidence based, and grounded on the best practice examples from other countries. Both the Polish tobacco control law and the WHO Framework Convention on Tobacco Control (FCTC), ratified by Poland in 2006, oblige our country to support tobacco control, including all the initiatives taken by the European Union.

Key words

Health, tobacco-caused diseases, new EU Directive

INTRODUCTION

Health background – tobacco or health. Despite the significant health improvement in Poland after 1990, the levels of premature mortality of young and middle-aged adults, especially males, remain far above European standards [1, 2, 3, 4]. At the end of the first decade of the 21st century, almost every third Polish male does not live to 65 years of age. This contrasts dramatically with the situation in Western Europe, where the great majority of people live in good health to the age of 65 (Fig. 1).

The most important preventable cause for this dramatic loss of human capital and working age population are the high rates of tobacco smoking [5], and the resulting harm to health [6]. It is estimated that almost half of the difference in life expectancy between Poland and Western Europe is a result of tobacco smoking (Tab. 1).

Tobacco smoke contains 4,000 chemical compounds and is one of the main causes of cancers, cardiovascular and respiratory diseases [7]. A good indicator of the tobacco-related harm to health is lung cancer, which exists almost exclusively among tobacco smokers [8]. Lung cancer rates therefore illustrate accurately the effects of tobacco regulations in different parts of Europe. An example of this is Sweden,

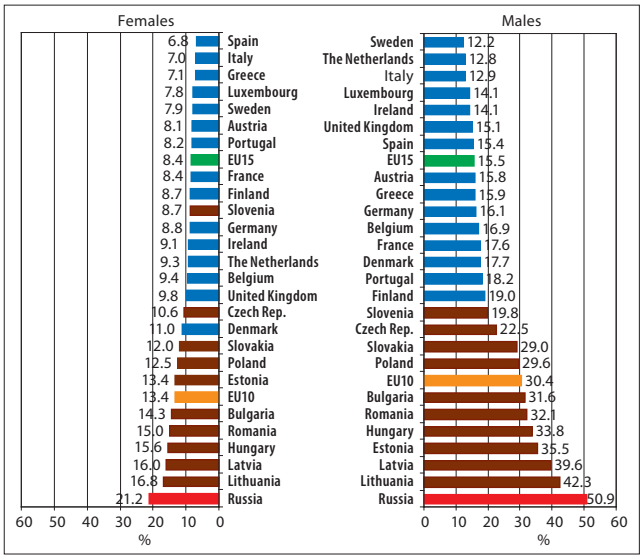

Figure 1. Probability of dying before 65 years of age in European Union countries and Russia, males and females, 2008 (2006: Belgium, Denmark); blue and green – countries of Western Europe, brown, orange and red – countries of Central and Eastern Europe, including Russia. Source [1]

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Table 1. Impact of tobacco on differences in life expectancy between Poland and Western Europe (EU15)

Males			
Age group	Difference in life expectancy (years)	Difference attributed to tobacco smoking	
		years	%
35–64	3.80	1.75	46%
Females			
Age group	Difference in life expectancy (years)	Difference attributed to tobacco smoking	
		years	%
35–64	1.42	0.28	20%

Source: [1]

the country with the lowest smoking levels in Europe, as well as the lowest lung cancer mortality (Fig. 2) [9, 10].

For the above reasons, decreasing smoking prevalence has been for many decades a key element of the *Health in All Policy* approach taken by many European countries [11]. A good example of a country which was successful in controlling tobacco-related health harm is Great Britain, which used to be a major power in tobacco sales and consumption. In the 1940s, 80% of adult British males smoked, and their lung cancer prevalence was among the highest in the world [12]. The British government launched a comprehensive campaign against smoking, involving economic and educational policy (building health competencies among doctors, politicians, and all citizens). Cigarettes were heavily taxed and today Great Britain is a country with the highest tobacco prices in Europe; cost of cigarettes is four times higher than in Poland.[1]

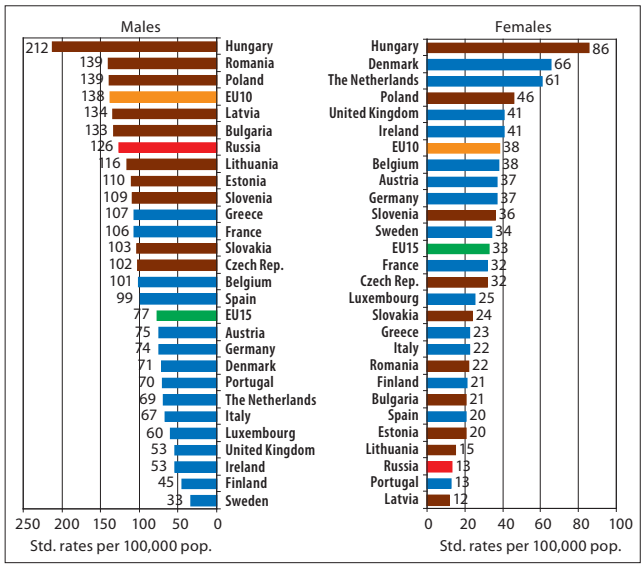

Figure 2. Lung cancer mortality in European Union countries and Russia, males and females, age group 45-64, 2008 (2006: Belgium, Denmark); blue and green – countries of Western Europe, brown, orange and red – countries of Central and Eastern Europe, including Russia. Source [1]

As a result of these actions, smoking prevalence in Great Britain fell to 20% at the beginning of the second decade of the 21st century. This decline helped to reverse the lung cancer trends, decreasing their prevalence threefold. British researchers estimate that also half of the decrease in cardiovascular diseases can be attributed to this decline in tobacco consumption [14]. The change of attitudes towards health (walking away from focusing solely on curative medicine), building the health competencies of society and combating health illiteracy, developing more health-oriented lifestyles, the involvement of the state and society in public health programmes ('health is too important to leave in the hands of doctors') – all these developments helped in achieving a stunning health growth in Great Britain, similar to other countries of Western Europe.

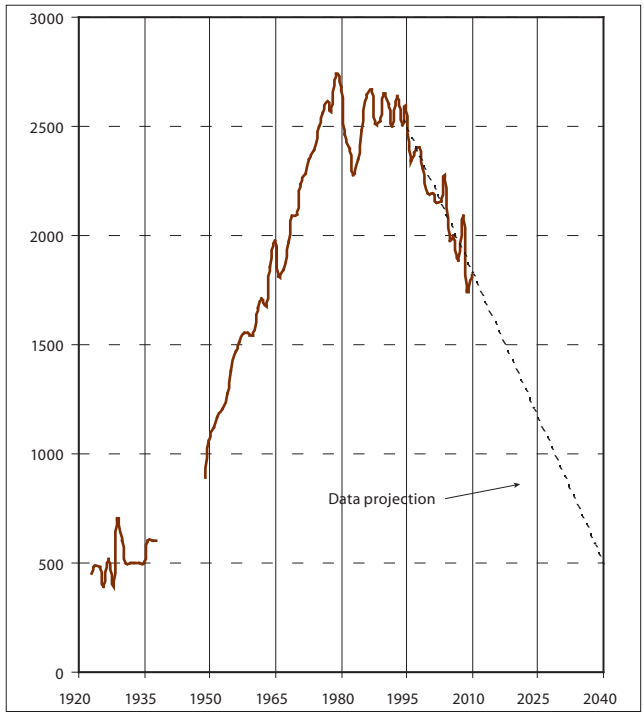

Figure 3. Cigarette consumption *per capita* in Poland, 1923-2010. Source [15]

Europeans, including Poles, are becoming less interested in smoking (Fig. 3). The removal of smoking from the habits of Europeans is inevitable in the coming decades, and the decision-makers have begun to acknowledge this. For instance, the Finnish parliament recently adopted a public health strategy aiming to free the country from the tobacco epidemic by 2040. Most European countries conduct a health policy which uses all accessible methods, such as a ban on cigarette advertising or a ban on smoking in public places, in order to eventually achieve a similar goal to Finland. The new EU Tobacco Products Directive, analysed in this paper, is a further step towards the realization of this vision. It is important to remember that not only health experts and politicians, but also the great majority of citizens of the EU and Poland support the long-term strategy of tobacco smoking reduction, as well as the actions proposed by subsequent EU directives.

History of legislation aimed at reducing tobacco-related health harm in the European Union. Legislation regarding tobacco has been used in the European Union for many years as a significant element of the strategy of counteracting the negative health and socio-economic consequences of

1. At the beginning of the second decade of the 21st century, Poland is a major tobacco and cigarette producer, but no longer a leading tobacco consumer. The consumption of cigarettes in Poland declined by 30% in the years 1990–2010 [13].

smoking. The structure and level of the excise tax on tobacco products are frequently adjusted.[2] In 2001, the European Parliament and the Council of the European Union issued a directive regarding the production, presentation, and sale of tobacco products.[3] Two years later, in 2003, a directive banning the advertisement of tobacco products in the printed media, radio shows and news services, was introduced.[4] Due to a complaint made by the German government, the European Court of Justice, referring to Directive 2003/33/EC, which banned the advertising and sponsoring of tobacco products, decided that the legislation is aimed first and foremost at protecting public health, and not regulate the internal tobacco market.[5] The directives issued by the EU emphasise that their acceptance by all member States will allow for a more effective approach to the reduction of the health and socio-economic consequences of tobacco smoking.

From the late 1990s, the European Union participated in the preparation of the WHO Framework Convention on Tobacco Control [16]. This was the first convention in history regarding health enacted by the United Nations. The legal regulations contained in the Convention became a road-sign for global, regional, and national health policies. The Convention was ratified by the European Parliament in 2005.

In 2007, the European Commission developed a strategy for reducing smoking in public places and workplaces [17]. In 2009, the European Parliament issued a resolution on this issue,[6] accompanied by a EU Council recommendation.[7] At present, the ban on smoking in public places has been introduced in the majority of EU countries, including Poland.

Legislation in Poland and its influence on the behaviour and health of Poles. In the early 1990s, the mortality of middle-aged males (35–69 years old) in Poland was soaring, and even exceeded the mortality in developing countries such as China or India [18]. Almost every second premature male death in Poland was caused by tobacco smoking [19], which was at one of the highest levels in the world [20]. The World Bank estimated that the health situation in Poland and other Eastern European states could affect their economic development, especially in the period of transition, and together with the World Health Organisation urged them to take radical steps to reduce smoking prevalence [7].

The newly elected, democratic Polish Sejm (lower house of the Polish Parliament), urged by a motion by the medical community, took up this challenge [21]. On 9 November 1995, it almost unanimously passed a law on the protection of health from tobacco and tobacco products, which became the fundamental legal document on this issue [22]. Poland became the first country in Central Eastern Europe to pass a law on controlling the tobacco epidemic contingent with world standards. The law was recognised by the majority of Poles,[8] and was welcomed by the World Health Organisation as 'an example for the rest of the world' [23].

A particularly well-evaluated measure was the introduction of health warnings covering 30% of the surface of cigarette packets – one of the largest such warnings in the world.[9] During a session of the European Parliament in 2000 discussing the project of the European Commission Directive (which was eventually accepted in 2001), the members of European Parliament underlined that since 'in Poland the warnings take up 30% of the surface of the cigarette packets, the EU cannot ask for less'.[10] It is also worth remembering that Poland was one of the first countries in Europe where the ban on tobacco advertising, promotion and sponsorship came into force. Both of the aforementioned tobacco control measures were passed by the Polish parliament when Poland was not yet a member of the European Union.

The example of Poland as a country conducting a modern health policy reducing smoking was included in the materials of the World Bank [24]. The legislation was forward-looking and comprehensive – it integrated actions and instruments which would help limit the health consequences of smoking. It contained provisions which allowed for a more effective protection of children and adolescents from starting smoking or consuming tobacco in a different form, such as a ban on the sale of tobacco products in vending machines, or the ban on production and sale of smokeless tobacco products.

In the following years, the legislation was amended, strengthening the elements focusing on protection of the health of children and non-smokers.[11] Among the most efficient innovations were a ban on advertising, promoting and sponsoring of tobacco, as well as a ban on smoking in public places and workplaces (results of some of the studies regarding these changes are shown below). The Minister of Health issued a decree regarding health warnings and information about the content of harmful substances in tobacco products.[12]

The process of adapting Polish legislation to EU directives, including those regulating the tobacco market, was very expeditious. New, larger health warnings conforming to the catalogue suggested by the European Commission were introduced on the packaging of tobacco products sold in Poland. The sale of 'light' and 'mild' cigarettes, terms which suggested that their consumption might be less harmful, was banned. Polish norms on the content of tar, nicotine, and carbon monoxide were adjusted to meet EU norms.

The necessity to protect Polish citizens from the carcinogenic and toxic properties of tobacco smoke is not just a result of Polish legislation and the need to adjust it to EU law, but also of the international legal commitments of the Republic of Poland. Poland was one of the initiators of the WHO Framework Convention on Tobacco Control, which regulates strategies towards tobacco on a global scale. The Polish Parliament ratified the Convention in 2006, committing it to the implementation of its guidelines. The new directive proposed by the European Commission aiming to protect the health of its citizens from the consequences of tobacco consumption is another step in the process of adjusting the

2. European Commission Directives 92/79/EEC, 92/80/EEC, 95/59/EC, 2008/118/EC, 2010/12/EU, 2011/64/EU, Brussels.
3. European Commission Directive 2001/37/EC, Brussels.
4. European Commission Directive 2003/33/EC, Brussels.
5. C-380/03 of 12 December 2006.
6. 2010/C 285 E/09
7. 2009/C 296/02
8. 72% of Poles heard or read about the law. Survey study conducted between 15–18 May 1997 by OBOP at the request of the Cancer Center and Institute on a sample of 1,500 inhabitants of Poland aged over 15.
9. Letter from Prof. Ruth Roemer, former President of the American Public Health Association, to Prof. Witold Zatonski, dated 9 December 1998.
10. Extract from a European Parliament document regarding the EC directive Cl. Nr 2541–2543 of 29 May 2000.
11. The legislation was amended in 1999 (Dz.U. nr 96, poz.1107), 2003 (Dz.U. nr 229, poz.2274) and 2010 (Dz.U. nr 81, poz.529).
12. Decree of 1996 (Dz.U. nr 146, poz.685), 2000 (Dz.U. nr 92, poz. 1023) and 2004 (Dz.U. nr 31, poz.275).

legislation of EU Member States to the requirements of the Convention [25].

The legislative steps, the health policy of the state, and the programmes for smoking reduction, all had a positive influence on the smoking behaviour of Poles and, in consequence, on their health. The 1995 law controlling the negative consequences of smoking was the main reason for the decline in tobacco consumption observed from the first half of the 1990s (Fig. 3). The tobacco industry, which in the early 1990s forecast a 20% growth of tobacco sales in Poland and spent hundreds of millions of zloty on advertising, admitted this themselves.[13] The decline in tobacco consumption was one of the main reasons for Poland's health improvement, especially among males.

Sociological and epidemiological research suggests that significant changes have occurred in the health awareness of Poles, in their attitudes towards smoking, and in health indicators in Poland. Toxicological studies showed that the content of harmful substances in cigarettes in Poland has been adjusted to EU norms.

Changes in health awareness

- Between 1974 and 2008, there was a significant increase in the proportion of Poles who considered smoking as a significant hazard to the health of the smoker (from 46% to 65%).[14]
- After the nationwide debate about the introduction of the ban on smoking in public places and workplaces in 2010, a significant increase was noted in the proportion of smoking Poles who believe that passive smoking is harmful to children and pregnant women, and that it is a cause of cardiac infarction.[15]

Changes in attitudes towards smoking

- In the years 1982–2010, the percentage of adult daily smokers decreased almost twofold – among men aged over 20 it fell from 65% to 35%, among adult women (aged over 20) from 32% to 22%, among young women (aged 20–29) from around 50% to 22% [13, 26].
- Towards the end of the 1990s, when tobacco advertising and promotion were banned, the percentage of smoking boys and girls began to decline (among 15-year-old boys it fell from 34% in 2002 to 24% in 2006, among girls from 28% in 1998 to 21% in 2006) [27].
- Between 1996 and 2009, the percentage of non-smokers exposed to tobacco smoke at home also declined (among males from 39% to 19%, among females from 47% to 26%), as did the exposure at work (among males from 49% to 17%, among females from 37% to 12%).[16]
- After the introduction in 2010 of further regulations relating to the 1995 ban on smoking in public places and workplaces, the proportion of people exposed to tobacco smoke in those places decreased further.[17]
- Thanks to the ban on smoking in public places around a million Poles quit smoking or made the decision to quit smoking.[18]

Changes in health indicators

- Since the beginning of the 1990s, the prevalence of lung cancer has been decreasing among males of all ages, and also among young females (aged 20–44). Lung cancer prevalence and mortality indicators among males decreased by 30% [1].
- Epidemiological estimates indicate that 15% of the decrease in male CVD mortality in Poland was a result of the decrease in tobacco consumption [28].
- Between 1990 and 2010, the percentage of males dying prematurely due to tobacco-related diseases has declined from 42% to 33%, while their total number has fallen from 45,000 to 30,000 [19].
- In the years 1991–2001, the probability of death among males aged 20–64 decreased by a quarter – from almost 40% to 30% [1].

THE NEW EU TOBACCO PRODUCTS DIRECTIVE – ITS GOALS, MAIN REGULATIONS AND SCIENTIFIC RATIONALE

Goals and main regulations of the Directive

The main strategic goal behind the implementation of tobacco control regulations proposed in the new EU Tobacco Products Directive is 'to improve the functioning of the internal market while ensuring a high level of health and consumer protection' [29]. In order to ensure a high level of health protection, preventive actions might be taken into consideration, particularly those addressed to females, adolescents and young adults. One of the most important reasons for preparing the Directive proposal was the ratification of the WHO Framework Convention for Tobacco Control (FCTC) by the European Union and its Member States. The FCTC obliged those countries to enforce the most comprehensive tobacco control policies and programmes. Furthermore, there is a need for harmonization of tobacco control policies in all EU countries according to recommendations and guidelines of the Convention. Currently, the approach to comprehensive tobacco control policies and the progress in FCTC implementation differ between the various Member States.

The principal legislative regulations proposed by the new Directive focus on the production and sale of smokeless tobacco products, standards of tobacco packaging and labelling, the content of harmful substances and information on additives to tobacco products, cross-border sales of

13. 'In Poland, the stringent tobacco control law is having a positive effect in reducing tobacco consumption' (see: World Tobacco, July 1998).

14. Based on the comparison of results of nation-wide surveys conducted in 1974 and 2008 by OBOP and TNS OBOP on a representative sample of Polish population aged over 15 (N=992 in 1974, N=1005 in 2008). Database of the Cancer Center and Institute in Warsaw.

15. Comparison of the results of nation-wide surveys conducted in 2009 (at the request of the Health Promotion Foundation) and 2011 (at the request of Chief Sanitary Inspectorate and the MANKO Association) by TNS OBOP on samples of Polish population aged over 15 (N=1003 in 2009, N=1005 in 2011). Database of Cancer Center and Institute in Warsaw.

16. Comparison of results of nation-wide surveys conducted in 1996 (at the request of the Polish Radio) and 2009 (at the request of the Health Promotion Foundation) by TNS OBOP on Polish population samples aged over 15 (N=1088 in 1996, N=1003 in 2009). Database of the Cancer Center and Institute in Warsaw.

17. Ibidem.

18. Nation-wide survey conducted in 2011 at the request of the Cancer Center and Institute in Warsaw by TNS OBOP on a sample of Polish population aged over 15 (N=1000). Database of the Cancer Center and Institute in Warsaw.

tobacco products, as well as the traceability and security features of tobacco packaging. Below are mentioned the most important regulations proposed in the Directive.

- It is proposed to introduce mixed, pictorial and textual health warnings on 75% of the front and back surface of packets of manufactured cigarettes and rolling tobacco.
- On tobacco packets, information on tar, nicotine and carbon monoxide content should be replaced with an information message referring to the over 70 substances known to cause cancer.
- Information on smoking cessation (e.g. quitline number) has to be displayed on all tobacco packets.
- The sale of tobacco products that contain chemical compounds or aromatic and flavouring substances which increase toxicity, addictiveness and attractiveness of tobacco products should be banned.
- The sale of so-called slim cigarettes (with a diameter of less than 7.5 mm) should be banned.
- A ban is proposed on the placing of messages, including names, signs, symbols and colours that may mislead consumers; for example, suggesting lower harmfulness of tobacco.
- Tobacco products containing nicotine in amounts higher than the permitted level should be produced and sold only if they belong to the category of treatment products.
- It is proposed to retain in EU countries the ban on sale of smokeless tobacco products, especially 'snus' (with the exception of Sweden).
- A single packet of manufactured cigarettes should contain at least 20 cigarettes, and rolling tobacco cannot be sold in packages containing less than 40 grams of tobacco.
- Member States are allowed to introduce standardized packets of tobacco products in as far as this provision is compatible with the Treaty and Directive 98/34/EC.
- The tobacco industry is obliged to provide information on all ingredients added to tobacco products.
- The introduction of a tracking and tracing system for tobacco products in all EU countries is proposed.
- Tobacco products should have visible security features in order to facilitate the identification of authentic products by consumers and controlling agencies.

Enforcement of the new tobacco control legislative measures proposed in the Directive is justified by the results of scientific studies referring to the toxicity of tobacco products, health consequences of tobacco use, and attitudes toward tobacco and tobacco control policies in the European Union, including Poland. The major results of these studies are presented below:

Scientific rationale behind the Directive

1. Toxicity of tobacco smoke and health effects of smoking:

- There is no safe dose of tobacco smoke or 'healthier' tobacco products [30]. Smoking light, menthol or slim cigarettes does not substantially reduce the risk of lung cancer because smokers of such tobacco products tend to inhale tobacco smoke deeper or smoke more cigarettes when compared with their smoking habits for regular cigarettes (with higher content of nicotine) [30].
- There is no evidence that smoking light, menthol or slim cigarettes reduces the health risks of smoking, including lung cancer and cardiovascular diseases [30].
- Toxicological studies prove that menthol cigarettes may contain more carcinogenic compounds, such as benzo[a] pyrene and N-nitrosamines, than other types of cigarettes [31, 32].
- Smoking of any type of cigarette, including light, slim or menthol cigarettes, contributes to behavioural and/or pharmacological dependence on tobacco. Tobacco addiction makes quitting smoking harder, prolongs the duration of tobacco smoking and, in effect, increases the risk of tobacco-related diseases [33].
- Some chemical additives to tobacco products, for example, nitrates, may substantially increase the content and psychoactive potential of nicotine, while aromatic and flavouring substances, including menthol, increase the attractivenes of tobacco products and reinforce the psychological mechanisms of tobacco addictiveness [32].

2. Attitudes towards tobacco smoking:

- The percentage of females, especially young women, who smoke menthol cigarettes, is increasing [34].
- The low price of hand-rolled cigarettes contributes to increasing the percentage of smokers, including teenagers [26, 35].
- The majority of Polish smokers (63%) think that a lower content of tar or nicotine is an indicator of the lower harmfulness of some cigarettes [34].
- One in four smokers in Poland believes that some cigarettes might be less harmful than others [26].
- One in four smoking Poles believes that cigarette flavour and aroma (i.e. menthol), as well as certain colours of cigarette packets, may indicate a lower harmfulness of some cigarettes [34].
- Only 39% of adult Poles think that use of smokeless tobacco products may cause serious diseases [26].

Why should Poland support the Directive? Poland should unequivocally support the proposed EU Directive first and foremost due to the health necessities of our country. The solutions suggested by the Directive will allow raising the societal level of awareness of the health hazards resulting from the consumption of tobacco and, consequently, will improve health behaviours. This will be achieved through a series of measures. First, there will be the introduction of large pictorial health warnings on tobacco packets, as well as information on the harmfulness of the toxic substances in cigarettes. Second, will be the introduction of plain packets for tobacco products in all EU countries. Third, will be the placing of information about obtaining help in quitting smoking, such as the phone number of a Quitline, on all tobacco packets, which will allow the strengthening of the existing system for treating tobacco addiction in Poland. Fourth, will be the ban on the sale of aromatic cigarettes (e.g. menthol) as well as 'slim' cigarettes, which are becoming increasingly popular among teenagers and young females. This will help to protect the health of smokers from the additional toxic substances present in these products, and to better understand that there is no such thing as a 'healthy cigarette'. Fifth, the ban on the sale of smokeless tobacco, including electronic cigarettes and herbal smoking products, will serve to protect the health of those teenagers who are at risk of commencing smoking. Finally, a stricter regulation of loose tobacco used for rolling cigarettes, which is the cheapest tobacco product in Poland, is aimed at protecting children and the poorer citizens (who in Poland constitute the majority of smokers) [26].

The acceptance of the solutions proposed by the Directive would be congruent with the goals and directions of the existing Polish legislation limiting the negative health and socio-economic consequences of smoking and the health politics. Such acceptance will also allow the implementation of subsequent articles of the Framework Convention on Tobacco Control, which Poland ratified in 2006. As a member of the EU, Poland also has the duty to adjust to the Union's directives, including those harmonizing health policy leading to closing the health gap between the new (EU10) and old (EU15) Member States, which was the main goal of the health package of the Polish presidency of the EU in 2011.

The solutions contained in the Directive are rated as effective by scientific studies, have been proved to work in many countries (also in the EU)[19], and are recommended by the World Health Organisation and by the World Bank [7, 36]. It is estimated that the introduction of large pictorial health warnings on cigarette packets will lead to a decrease in tobacco consumption by about 5% of the entire population, and by 10% in the young and less educated segments of the population [36]. This means that after the introduction of the regulations proposed by the EU Directive (75% of the cigarette packets to be covered by text and pictorial health warnings on the front and back) about 500,000 Poles could quit smoking. It is worth remembering that after the introduction of the 30% health warnings on cigarette packets in Poland in 1998, around 300,000 smokers declared that they quit smoking due to this measure [21, 24]. Another proof of the benefits of EU tobacco control policy in Poland is the effect of the placement of the quitline number on a portion (1/14) of cigarette packs sold in the country in 2004 as part of the adjustment of the Polish cigarette market to EU norms. This change led to a several times rise in the number of callers to the National quitline.

Finally, it needs to be emphasised that the majority of Poles support the introduction of the legal regulations restricting smoking proposed by the Directive. This is suggested, for example, by the results of a nationwide survey conducted by the European Commission in 2009 in all EU Member States [34]. The proportion of Poles supporting the introduction of pictorial health warnings on the packaging of all tobacco products amounted to 83% (with 11% of those opposed to such warnings), and was among the highest in the European Union (where the average was 75%). In addition, 52% of Poles were in favour of a ban on the sale of aromatic tobacco products (with 28% against). The proposal to standardise tobacco packaging received the support of 49% of those polled (with 32% opposed).

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19. For example, in Belgium, Romania, and the UK (also in the Ukraine) pictorial health warnings were introduced. As in most of the EU countries, a ban on smokeless tobacco also exists (in Poland with the exemption of snuff), while plain, standardized packaging has been recently introduced in Australia, and some European countries are planning to follow its example.

REFERENCES

1. Zatonski W, Manczuk M, Sulkowska U, and HEM project team. Closing the health gap in the European Union. Cancer Center and Institute of Oncology. Warsaw 2008 (Polish edition: Zatonski W, Manczuk M, Sulkowska U, i zespół projektu HEM. Wyrównywanie różnic w zdrowiu między krajami Unii Europejskiej. Centrum Onkologii-Instytut. Warszawa 2011) (available at: www.hem.waw.pl).
2. Zatonski W, McMichael AJ, Powles JW. Ecological study of reasons for the sharp decline in mortality from ischaemic heart disease in Poland since 1991. Br Med J. 1998; 316(7137): 1047–51.
3. Zatonski WA, Bhala N. Changing trends of diseases in Eastern Europe: Closing the gap. Public Health 2012; 126: 248–252.
4. Zatonski W. Health-happiness of Poland and its citizens. Polish economy: Development of regions. Warsaw 2012: 216–225 [in Polish].
5. Zatoński W, Przewoźniak K, Sulkowska U, West R, Wojtyła A. Tobacco smoking in countries of the European Union. Ann Agric Environ Med. 2012; 19(2): 181–192.
6. Feachem R. Health decline in eastern Europe. Nature 1994; 367(6461): 313–4.
7. World Bank: Development in practice. Curbing the epidemic. Governments and the economics of tobacco control. Washington (DC) 1999 (Polish edition: Bank Światowy: Rozwój w praktyce. Przeciwko epidemii. Działania rządów a ekonomika ograniczenia konsumpcji tytoniu. Medycyna Praktyczna, Kraków 2002).
8. Thun MJ, Henley SJ, Burns D, Jemal A, Shanks TG, Calle EE. Lung cancer death rates in lifelong non-smokers. J Natl Cancer Inst. 2006; 98(10): 691–9.
9. Wramner B, Zatoński W, Pellmer K. Premature mortality in lung cancer as an indicator of effectiveness of tobacco use prevention in a gender perspective – a comparison between Poland and Sweden. Cent Eur J Publ Health. 2001; 9(2): 69–73.
10. Zatoński W. Lung cancer trends in selected European countries: What we can learn from the Swedish experience with oral tobacco (snuff). In: European Status Report 2003 on Oral Tobacco. European Network for Smoking Prevention, Brussels 2003: 37–54.
11. Stahl T, Wismar M, Ollila ELE, Leppo K. Health in All Policies: Prospects and potentials. Ministry of Social Affairs and Health, Finland, Helsinki 2006.
12. Doll R, Peto R, Boreham J, Sutherland I. Mortality in relation to smoking: 50 years' observations on male British doctors. Br Med J. 2004; 328(7455): 1519.
13. Zatoński W, Przewoźniak K, Sulkowska U, Mańczuk M, Gumkowski J. Tobacco smoking in male and female population, Poland 1974–2004. Zeszyty Naukowe Ochrony Zdrowia. Zdrowie Publiczne i Zarządzanie 2009;7(2):4–11 [in Polish]
14. Unal B, Critchley JA, Capewell S. Explaining the decline in coronary heart disease mortality in England and Wales between 1981 and 2000. Circulation 2004; 109(9): 1101–7.
15. Central Statistical Office. Statistical Yearbooks. Warsaw 1928–2010.
16. World Health Organization. The Framework Convention on Tobacco Control. Geneva 2003 (available at: (http://www.mz.gov.pl/wwwmz/index?mr=m9&ms=&ml=pl&mi=91&mx=0&ma=18876)
17. European Commission. Green Paper. Towards a Europe free from tobacco smoke: policy options at EU levels. COM(2007) 27 final. Directorate-General Health and Consumer Protection, Brussels 2007.
18. Murray CJL, Lopez AD. Alternative projections of mortality and disability by cause 1990–2020: Global Burden of Disease Study. Lancet 1997; 349: 1498–1504.
19. Peto R, Lopez A, Boreham J, Thun M, Heath C Jr. Mortality from Smoking in Developed Countries 1950–2010. Oxford University Press, Oxford (UK) 1994 (updated 2012).
20. Forey B, Hamling J, Lee P, Wald N. International Smoking Statistics. A collection of historical data from 30 economically-developed countries (2nd edition). The Wolfson Institute of Preventive Medicine, Oxford 2002.
21. Zatoński W. A nation's recovery. Case study of Poland's experience in tobacco control. Health Promotion Foundation, Warsaw 2003 [in Polish].
22. Sejm of the Republic of Poland. The Law on Health Protection Against Effects of Tobacco Use. Dziennik Ustaw 1996, Nr. 10, poz. 55. [in Polish]
23. Blanke DD, de Costa e Silva V. Tools for advancing tobacco control in the 21st century. Tobacco control legislation: An introductory guide. World Health Organization, Geneva 2004.
24. Zatoński W. Democracy and Health. Tobacco Control in Poland. In: de Beyer J, Brigden LW (eds): Tobacco Control Policy. Strategies, Successes and Setbacks. The World Bank and the International Development Research Center, Washington 2003: 97–120.

25. World Health Organization. WHO Framework Convention on Tobacco Control. Guidelines for implementation of the WHO FCTC. Article 5.3. Article 8. Articles 9. and 10. Article 11. Article 12. Article 13. Article 14. Geneva 2011 (Polish version available at: http://www.mz.gov.pl/wwwmz/index?mr=m9&ms=&ml=pl&mi=91&mx=0&ma=19196).
26. Ministry of Health. Global Adult Tobacco Survey. Poland 2009–2010. Warsaw 2010 (Polish version available at: http://www.mz.gov.pl/wwwmz/index?mr=m9&ms=772&ml=pl&mi=772&mx=0&ma=16384).
27. Woynarowska B, Mazur J (eds). Changes in health behaviour and selected health indicators of schoolchildren in the years 1990–2010. Institute of Mother and Child, Warsaw 2012.
28. Bandosz P, O'Flaherty M, Drygas W, Rutkowski M, Koziarek J, Wyrzykowski B, et al. Decline in mortality from coronary heart disease in Poland after socio-economic transformation: modelling study. Br Med J. 2012; 344: d8136.
29. European Commission. Proposal for a Directive of the European Parliament and of the Council on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products. COM(2012) 788 final. Brussels, 19 December 2012.
30. US Department of Health and Human Services. The Health Consequences of Smoking: A Report of the Surgeon General. Atlanta (GA) 2004.
31. International Agency for Research on Cancer. A Review of Human Carcinogens: Personal Habits and Indoor Combustions. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Vol. 100E. Lyon 2012.
32. German Cancer Research Centre (DKFZ). Additives in Tobacco Products. Contribution of Carob Bean, Cellulose Fibre, Guar Gum, Liquorice, Menthol, Prune Juice Concentrate and Vanilin to Attractiveness, Addictiveness and Toxicity of Tobacco Smoking. Heidelberg 2012.
33. US Department of Health and Human Services. The Health Consequences of Smoking: Nicotine Addiction. A Report of the Surgeon General. Rockville (MD) 1988.
34. European Commission. Tobacco. Eurobarometer 72.3. Directorate General Health and Consumers, Brussels 2010.
35. Baska T, Sovinova H, Nemeth A, Przewozniak K, Warren CW, Kavcova E and the Czech Republic, Hungary, Poland and Slovakia GYTS Collaborative Group. Findings from the Global Youth Tobacco Survey (GYTS) in the Czech Republic, Hungary, Poland and Slovakia – smoking initiation, prevalence of tobacco use and cessation. Prev Med. 2006; 51: 110–116.
36. WHO Report on the Global Tobacco Epidemic, 2008. The MPOWER package. World Health Organization, Geneva 2008.